

# FT 50 RLA 20

Distance sensor



## PRODUCT HIGHLIGHTS

- High resolution and small laser light spot
- Operating range: 40 ... 60 mm
- Small, easily visible laser light spot
- No adjustments necessary
- Resolution: 7  $\mu\text{m}$  / 40  $\mu\text{m}$
- Analogue output: 0 ... 10 V
- Device plug rotatable through 270°

Optical data		Functions	
Operating range	40 ... 60 mm <sup>1</sup>	Indicator LED, green	Operating voltage indicator
Measurement range	20 mm	Indicator LED, red	Contamination indicator
Type of light	Laser, red, 670 nm	Scanning distance adjustment	Fixed setting
Laser Class (IEC 60825-1)	1		
Resolution	40 $\mu\text{m}$ / 7 $\mu\text{m}$ (see selection table)		
Linearity	< 1 %		
Light spot size	< 1 mm at 50 mm		
Repeatability	< 0.1 mm / 0.05 mm (see selection table)		
Electrical data		Mechanical data	
Operating voltage, +U <sub>B</sub>	18 ... 28 V DC	Dimensions	50 x 50 x 17 mm
No-load current, I <sub>0</sub>	≤ 35 mA	Enclosure rating	IP 67 <sup>2</sup>
Protective circuits	Reverse-polarity protection, U <sub>B</sub> / short-circuit protection, Q	Material, housing	ABS, impact-resistant
Protection Class	2	Material, front screen	PMMA
Analogue output	0 ... 10 V / max. 3 mA	Type of connection	See selection table
Limit frequency	400 Hz / 40 Hz (see selection table)	Ambient temperature: operation	0 ... +45 °C
Temperature drift	10 $\mu\text{m}$ / K	Ambient temperature: storage	-20 ... +60 °C
Rise time (10 to 90 %)	3 ms / 30 ms (see selection table)	Weight (plug device)	40 g
Fall time (90 to 10 %)	2 ms / 20 ms (see selection table)	Weight (cable device)	260 g
		Vibration and impact resistance	EN 60947-2

<sup>1</sup> Reference material: Kodak grey, 18 %    <sup>2</sup>With connected IP 67 plug

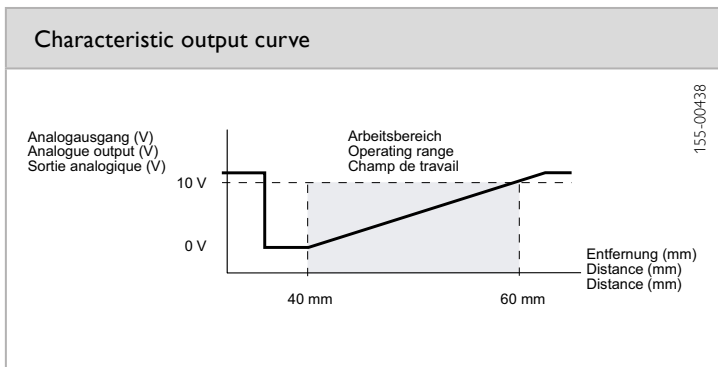
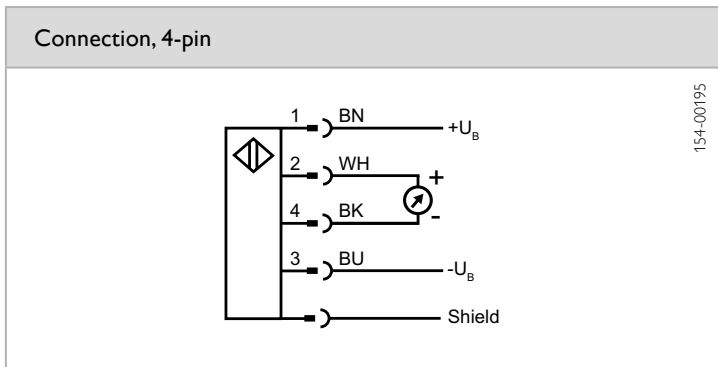
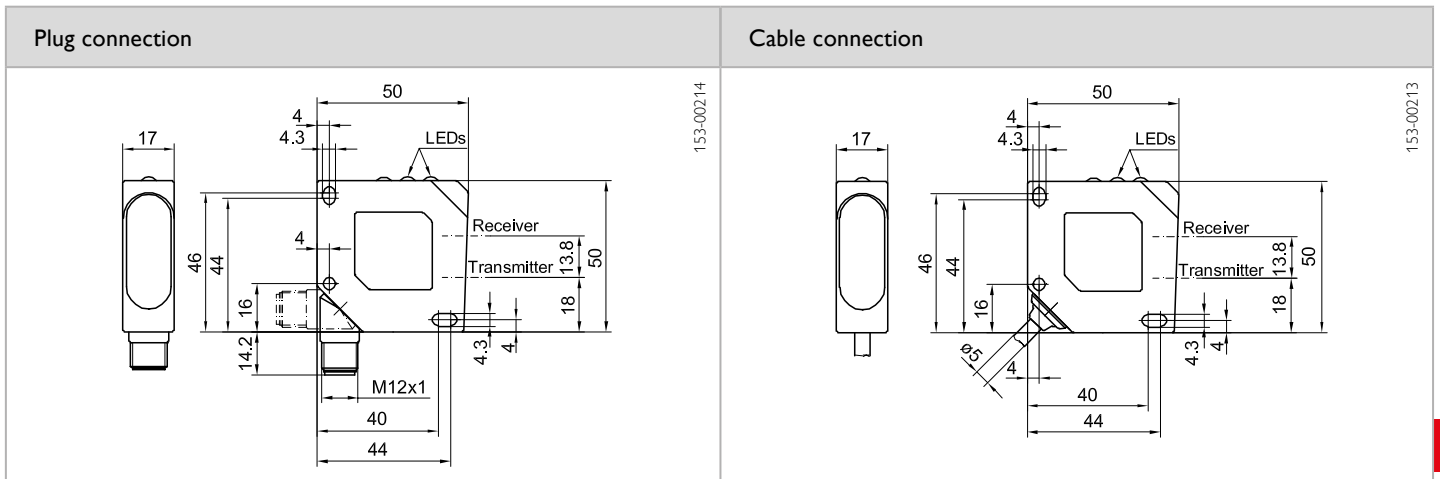
Resolution	Repeatability	Rise time	Fall time	Limit frequency	Type of connection	Part number	Article number
40 $\mu\text{m}$	< 0.1 mm	3 ms	2 ms	400 Hz	Plug, M12x1, 4-pin	FT 50 RLA-20-F-L4S	574-41005
7 $\mu\text{m}$	< 0.05 mm	30 ms	20 ms	40 Hz	Plug, M12x1, 4-pin	FT 50 RLA-20-S-L4S	574-41007
40 $\mu\text{m}$	< 0.1 mm	3 ms	2 ms	400 Hz	Cable, 6 m, 4-wire	FT 50 RLA-20-F-K5	574-41004
7 $\mu\text{m}$	< 0.05 mm	30 ms	20 ms	40 Hz	Cable, 6 m, 4-wire	FT 50 RLA-20-S-K5	574-41006

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### Accessories

Connection cables	<a href="http://www.sensopart.com/en/accessories">www.sensopart.com/en/accessories</a>
Brackets	

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